

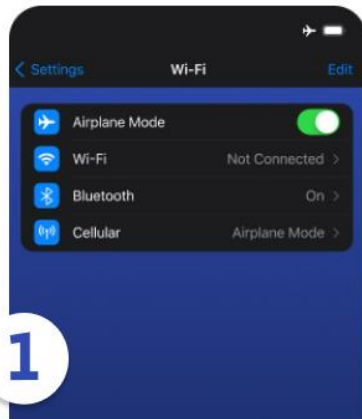
Exhibit 12 to Complaint
Intellectual Ventures I LLC and Intellectual Ventures II LLC

Example Southwest Count 5 Systems and Services
U.S. Patent No. 7,324,469 (“469 Patent”)

The Accused Systems and Services include without limitation Southwest systems and services that provide onboard WiFi in its airplanes; all past, current, and future systems and services that operate in the same or substantially similar manner as the specifically identified systems and services; and all past, current, and future Southwest systems and services that have the same or substantially similar features as the specifically identified systems and services (“Example Southwest Count 5 Systems and Services” or “Southwest Systems and Services”).

On information and belief, the Southwest Systems and Services provide onboard WiFi in its airplanes.

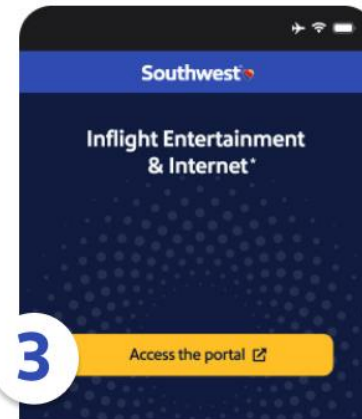
How to Get Connected ^



Head to **Settings**.
Turn on Airplane mode.



Turn on Wi-Fi.
Choose **SouthwestWiFi** from the WiFi network list.



Tap Access the portal or open **SouthwestWiFi.com** in your browser directly.

Source: <https://www.southwest.com/inflight-entertainment-portal/>.¹

¹ All sources cited in this document were publicly accessible as of the filing date of the Complaint.

We're excited to announce that as of yesterday, March 9, 2023, our first aircraft equipped with hardware from our new WiFi vendor, Viasat, has entered service. Viasat is an industry leader, and we're excited about the increased connectivity and reliability that Viasat will provide. As we prepare for additional Viasat-equipped aircraft deliveries, we're also making significant progress updating our existing fleet with new Anuvu hardware (our original WiFi vendor). We have now upgraded more than 400 aircraft and are well on our way to upgrading the entire fleet by the third quarter of this year.

Between our upgraded Anuvu hardware and integration of Viasat, we're bringing a faster, more reliable WiFi experience. In addition to improved WiFi quality, Viasat offers Customers the ability to trade paid internet connectivity between personal devices (known as "device swapping"). For example, if a Customer has paid for Internet using their laptop, they can use the "swap device" function in the Inflight Entertainment Portal to switch connectivity to their phone.

	Anuvu Legacy	Anuvu Upgraded	Viasat
Improved Speeds and Reliability	✗	✓	✓
Streaming (when authenticated for Internet)	✗	✓	✓
Device Swap	✗	✗	✓
Free Entertainment, Texting, and Flight Tracker	✓	✓	✓

Source: <https://www.swamedia.com/southwest-stories/wifi-modernization-first-viasat-aircraft-enters-service-MC5XTXWTTLWNESJDQR4LZQBIDI2I>.

U.S. Patent No. 7,324,469 (Claim 24)																						
Claim(s)	Example Southwest Count 5 Systems and Services																					
[24.pre] An Internet Hotspot comprising:	To the extent this preamble is limiting, on information and belief, the Southwest Count 5 Systems and Services include an Internet Hotspot.																					
	On information and belief, Southwest has partnered with Viasat and Anuvu ² to provide its passengers with in-flight Wi-Fi connectivity. Southwest aircraft are equipped with Viasat and Anuvu’s In-Flight Connectivity system.																					
	<p>We’re excited to announce that as of yesterday, March 9, 2023, our first aircraft equipped with hardware from our new WiFi vendor, Viasat, has entered service. Viasat is an industry leader, and we’re excited about the increased connectivity and reliability that Viasat will provide. As we prepare for additional Viasat-equipped aircraft deliveries, we’re also making significant progress updating our existing fleet with new Anuvu hardware (our original WiFi vendor). We have now upgraded more than 400 aircraft and are well on our way to upgrading the entire fleet by the third quarter of this year.</p>																					
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	<table><tr><td></td><td>Anuvu Legacy</td><td>Anuvu Upgraded</td><td>Viasat</td></tr><tr><td>Improved Speeds and Reliability</td><td>✗</td><td>✓</td><td>✓</td></tr><tr><td>Streaming (when authenticated for Internet)</td><td>✗</td><td>✓</td><td>✓</td></tr><tr><td>Device Swap</td><td>✗</td><td>✗</td><td>✓</td></tr><tr><td>Free Entertainment, Texting, and Flight Tracker</td><td>✓</td><td>✓</td><td>✓</td></tr></table>				Anuvu Legacy	Anuvu Upgraded	Viasat	Improved Speeds and Reliability	✗	✓	✓	Streaming (when authenticated for Internet)	✗	✓	✓	Device Swap	✗	✗	✓	Free Entertainment, Texting, and Flight Tracker	✓	✓
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² Based on publicly-available information, Plaintiffs have identified Viasat and Anuvu as Wi-Fi and/or In-Flight Connectivity (IFC) providers for Southwest. To the extent Southwest has used other IFC providers to provide satellite-based Internet connectivity to its customers, Plaintiffs reserve right to investigate such use.

U.S. Patent No. 7,324,469 (Claim 24)	
Claim(s)	Example Southwest Count 5 Systems and Services
	<p>DOES SOUTHWEST USE VIASAT?</p> <p>Yes. Southwest airlines announced in March 2023 that new aircraft with the airline will come with factory-installed Wi-Fi connectivity powered by Viasat. The Ka-band connectivity will offer faster, reliable Wi-Fi network connections for Southwest passengers. Viasat currently offers In-Flight Connectivity services to Delta Air Lines, JetBlue, American and United. The first Viasat-equipped aircraft entered service in March 2023 for various North American routes. Viasat is proud to have been selected as the provider in this partnership.</p> <p>The connectivity will use three large Ka-band satellites, Viasat-1, Viasat-2 and the recently launched Viasat-3 once it completes in-orbit testing, which is expected to be late summer or the fall of 2023. Viasat is a global communications company that provides high-speed satellite internet and other communication services. It operates a satellite network that delivers broadband internet access to residential, commercial, and government customers, particularly in areas where traditional wired internet infrastructure is limited or unavailable.</p> <p>Source: https://www.rsinc.com/does-southwest-use-viasat.php.</p> <p>Southwest, serving more than 100 million passengers each year, continues to offer the most comprehensive inflight entertainment and connectivity experience at all phases of flight, which now includes:</p> <ul style="list-style-type: none"> • Inflight WiFi available from gate-to-gate for \$8 per device per day • iMessage, available from gate-to-gate for \$2 per day, for iPhone users with iOS5 or later • Live Television streamed directly to passengers' own personal electronic devices, free of charge, courtesy of DISH • Video-on-Demand television content and movies <p>Powered by Global Eagle's satellite-based connectivity platform, the new service—in sync with gate-to-gate Wi-Fi—is also optimized to work in all phases of flight, including on the ground.</p> <p>Source: https://www.anuvu.com/our-company/press-releases/detail/30/southwest-airlines-and-global-eagle-entertainment-announce-launch-of-gate-to-gate-messaging-on-all.</p>

U.S. Patent No. 7,324,469 (Claim 24)																					
Claim(s)	Example Southwest Count 5 Systems and Services																				
[24.a] a satellite dish communicating with the Internet via one or more data links with a satellite;	<p>On information and belief, the Southwest Count 5 Systems and Services include a satellite dish communicating with the Internet via one or more data links with a satellite.</p> <p>On information and belief, Southwest’s aircraft are equipped with Viasat In-Flight Connectivity (IFC). This functionality uses satellite technology that communicates with the Internet through data links.</p> <p>We're excited to announce that as of yesterday, March 9, 2023, our first aircraft equipped with hardware from our new WiFi vendor, Viasat, has entered service. Viasat is an industry leader, and we're excited about the increased connectivity and reliability that Viasat will provide. As we prepare for additional Viasat-equipped aircraft deliveries, we're also making significant progress updating our existing fleet with new Anuvu hardware (our original WiFi vendor). We have now upgraded more than 400 aircraft and are well on our way to upgrading the entire fleet by the third quarter of this year.</p> <p>Between our upgraded Anuvu hardware and integration of Viasat, we're bringing a faster, more reliable WiFi experience. In addition to improved WiFi quality, Viasat offers Customers the ability to trade paid internet connectivity between personal devices (known as "device swapping"). For example, if a Customer has paid for Internet using their laptop, they can use the "swap device" function in the Inflight Entertainment Portal to switch connectivity to their phone.</p> <table><tr><th></th><th>Anuvu Legacy</th><th>Anuvu Upgraded</th><th>Viasat</th></tr><tr><td>Improved Speeds and Reliability</td><td>✗</td><td>✓</td><td>✓</td></tr><tr><td>Streaming (when authenticated for Internet)</td><td>✗</td><td>✓</td><td>✓</td></tr><tr><td>Device Swap</td><td>✗</td><td>✗</td><td>✓</td></tr><tr><td>Free Entertainment, Texting, and Flight Tracker</td><td>✓</td><td>✓</td><td>✓</td></tr></table> <p>Source: https://www.swamedia.com/southwest-stories/wifi-modernization-first-viasat-aircraft-enters-service-MC5XTXWTTLWNESJDQR4LZQBIDI2I.</p>		Anuvu Legacy	Anuvu Upgraded	Viasat	Improved Speeds and Reliability	✗	✓	✓	Streaming (when authenticated for Internet)	✗	✓	✓	Device Swap	✗	✗	✓	Free Entertainment, Texting, and Flight Tracker	✓	✓	✓
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U.S. Patent No. 7,324,469 (Claim 24)

Claim(s)

Example Southwest Count 5 Systems and Services

How it works

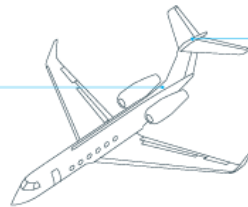
The service uses satellites to transmit data to and from the aircraft. Passengers connect their devices to the Viasat service through aircraft cabin WiFi distribution similar to how they connect to hotspots on the ground. Data is transmitted between the plane and the ground station through the satellite. As the plane moves through the air, the system automatically performs handovers between coverage areas.

Viasat equipment and network

MODEM



ANTENNA



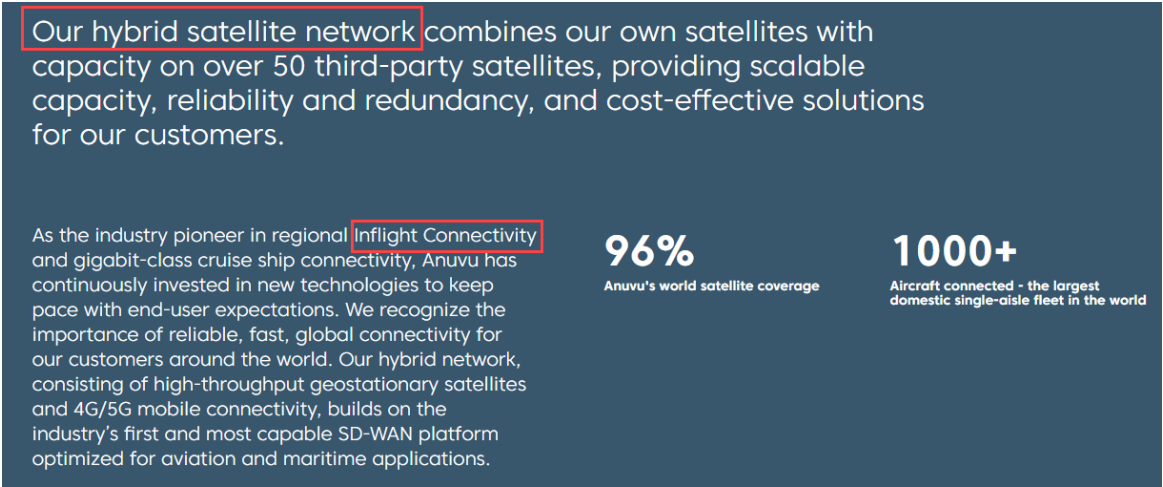

Equipping your aircraft

The Viasat Aero Mobile Terminal is an integral part in bringing high-speed internet service to large cabin business jets. The terminal, comprised of a small antenna, modem, and antenna control unit, integrates into the aircraft's cabin network and communicates on our network of satellites.

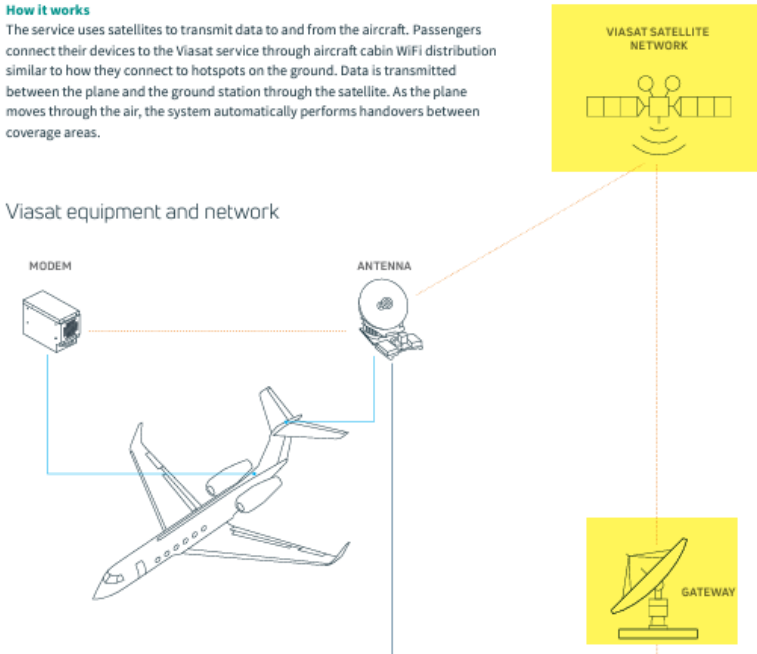



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Source: https://www.viasat.com/content/dam/us-site/aviation/documents/932043_Global_Ku-band_Advanced_Brochure_016_web.pdf.

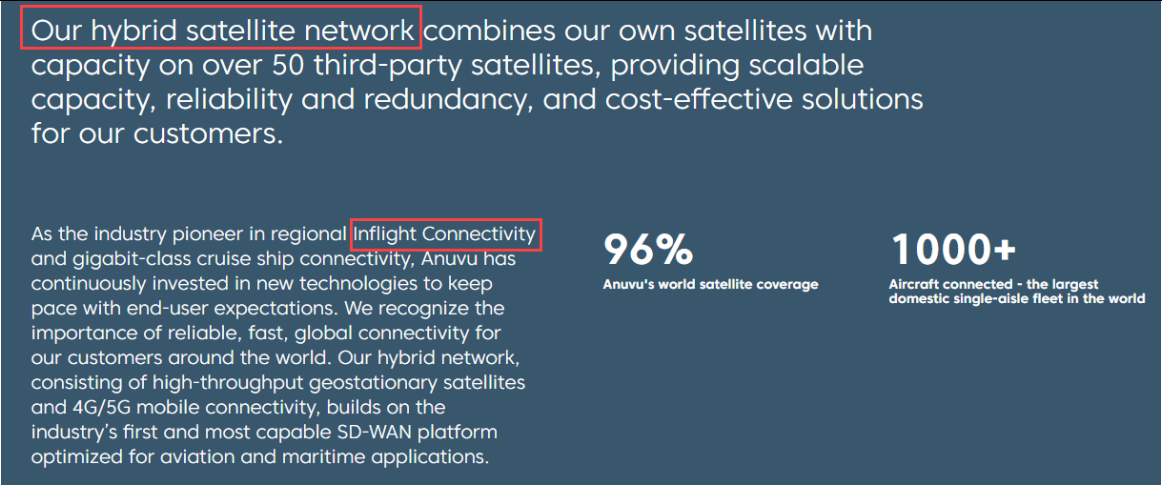
U.S. Patent No. 7,324,469 (Claim 24)	
Claim(s)	Example Southwest Count 5 Systems and Services
	<p>On information and belief, Anuvu functions similarly to Viasat.</p>  <p>Our hybrid satellite network combines our own satellites with capacity on over 50 third-party satellites, providing scalable capacity, reliability and redundancy, and cost-effective solutions for our customers.</p> <p>As the industry pioneer in regional Inflight Connectivity and gigabit-class cruise ship connectivity, Anuvu has continuously invested in new technologies to keep pace with end-user expectations. We recognize the importance of reliable, fast, global connectivity for our customers around the world. Our hybrid network, consisting of high-throughput geostationary satellites and 4G/5G mobile connectivity, builds on the industry's first and most capable SD-WAN platform optimized for aviation and maritime applications.</p> <p>96% Anuvu's world satellite coverage</p> <p>1000+ Aircraft connected - the largest domestic single-aisle fleet in the world</p> <p>Source: https://www.anuvu.com/our-portfolio/connectivity.</p>
[24.b] at least one router operatively coupled to the satellite dish;	<p>On information and belief, the Southwest Count 5 Systems and Services include at least one router operatively coupled to the satellite dish.</p> <p>On information and belief, Southwest's aircraft are equipped with Wi-Fi and/or IFC that includes a router that is connected to a satellite antenna mounted about the plane that communicates using a satellite and ground stations.</p>  <p>Viasat Select Router</p> <p>Redefining the in-flight connectivity experience</p>

U.S. Patent No. 7,324,469 (Claim 24)	
Claim(s)	Example Southwest Count 5 Systems and Services
	<div><p>The diagram illustrates a network architecture for a satellite-based system. On the left, a satellite dish icon is connected to three server racks labeled 'Optional ATG service', 'Viasat terminal (Ku or Ka)', and 'Optional L-band service'. These racks are connected via dashed lines to a central blue-shaded area representing the network core. Within this core, there is a '4G LTE' block with sub-points 'Router management' and 'Optional on-ground connectivity', and a 'Network management' block with sub-points 'Monitoring/statistics'. A central yellow-shaded router icon is connected to the 4G LTE block and has sub-points 'Least-cost routing' and 'Application firewall'. To the right of the router is a 'Wi-Fi access point' icon, which is connected to the router and has a dashed line leading to 'Optional additional antennas' on the far right.</p></div> <p>Source: https://www.viasat.com/content/dam/us-site/aviation/documents/Viasat_Select_Router-datasheet.pdf.</p>

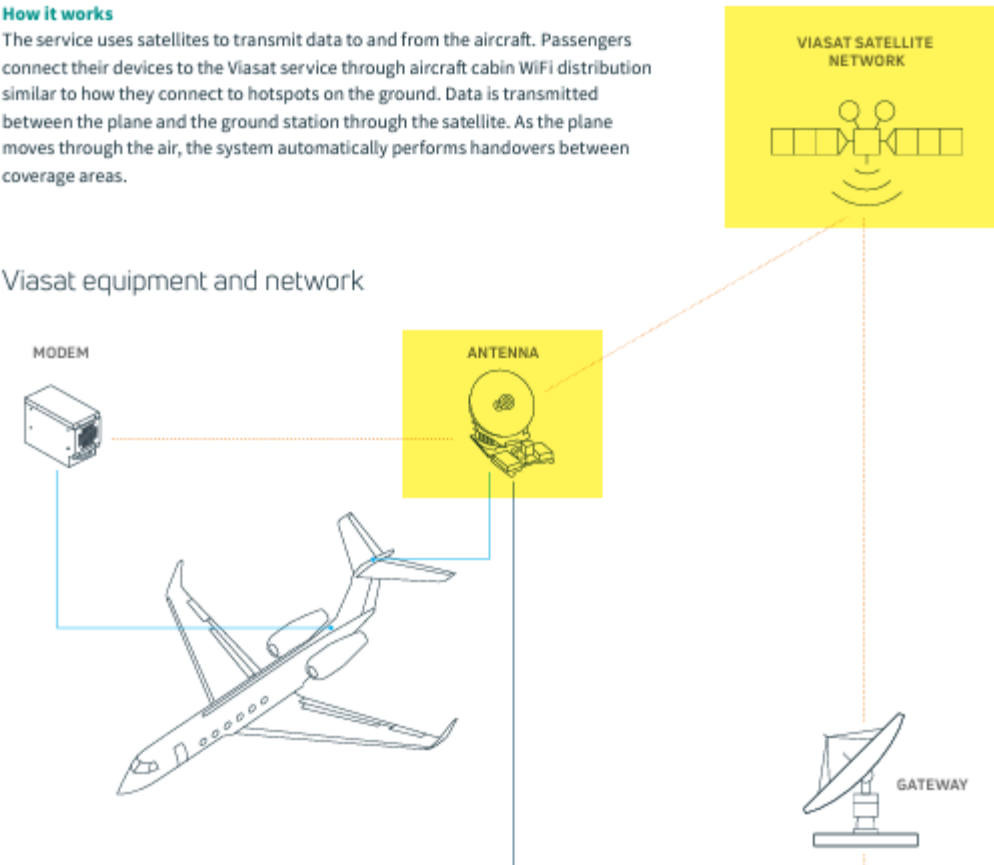
U.S. Patent No. 7,324,469 (Claim 24)	
Claim(s)	Example Southwest Count 5 Systems and Services
	<div><p>How it works</p><p>The service uses satellites to transmit data to and from the aircraft. Passengers connect their devices to the Viasat service through aircraft cabin WiFi distribution similar to how they connect to hotspots on the ground. Data is transmitted between the plane and the ground station through the satellite. As the plane moves through the air, the system automatically performs handovers between coverage areas.</p></div> <div><p>Viasat equipment and network</p><p>The diagram illustrates the Viasat system architecture. On the left, an aircraft is shown with a blue line representing the cabin WiFi network. This network connects to a 'MODEM' (represented by a small electronic device) and an 'ANTENNA' (represented by a parabolic dish). The antenna is connected to the 'VIASAT SATELLITE NETWORK' (represented by a yellow box containing a satellite icon). The satellite network is further connected to a 'GATEWAY' (represented by a yellow box containing a ground station dish icon). Dashed orange lines indicate the communication paths between the aircraft's antenna, the satellite, and the ground gateway.</p></div> <div><p>Source: https://www.viasat.com/content/dam/us-site/aviation/documents/932043_Global_Ku-band_Advanced_Brochure_016_web.pdf.</p></div>

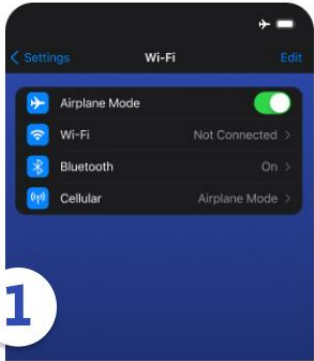

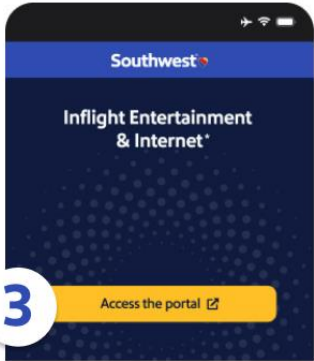
U.S. Patent No. 7,324,469 (Claim 24)	
Claim(s)	Example Southwest Count 5 Systems and Services
	 <p>Key features at a glance</p> <ul style="list-style-type: none"> › Smart, fully automated, multi-link cabin connectivity management › Integral 4G/LTE cellular data modem for quick and easy remote support › Small form factor, flange mounted, fan-less design for maximum flexibility and ease of installation › Built-in monitoring and diagnostics › Front panel I/O includes dual mini-SIM slot, USB, serial, Ethernet and DisplayPort allowing for easy maintenance access <p>Source: https://www.viasat.com/content/dam/us-site/aviation/documents/Viasat_Select_Router-datasheet.pdf.</p> <p>On information and belief, Southwest offers WiFi solutions (through its IFC providers) that support satellite-based WiFi.</p> <p>We're excited to announce that as of yesterday, March 9, 2023, our first aircraft equipped with hardware from our new WiFi vendor, Viasat, has entered service. Viasat is an industry leader, and we're excited about the increased connectivity and reliability that Viasat will provide. As we prepare for additional Viasat-equipped aircraft deliveries, we're also making significant progress updating our existing fleet with new Anuvu hardware (our original WiFi vendor). We have now upgraded more than 400 aircraft and are well on our way to upgrading the entire fleet by the third quarter of this year.</p> <p>Between our upgraded Anuvu hardware and integration of Viasat, we're bringing a faster, more reliable WiFi experience. In addition to improved WiFi quality, Viasat offers Customers the ability to trade paid internet connectivity between personal devices (known as "device swapping"). For example, if a Customer has paid for Internet using their laptop, they can use the "swap device" function in the Inflight Entertainment Portal to switch connectivity to their phone.</p>


U.S. Patent No. 7,324,469 (Claim 24)			
Claim(s)	Example Southwest Count 5 Systems and Services		
		Anuvu Legacy	Anuvu Upgraded
	Improved Speeds and Reliability	✗	✓
	Streaming (when authenticated for Internet)	✗	✓
	Device Swap	✗	✗
	Free Entertainment, Texting, and Flight Tracker	✓	✓
	<p>Source: https://www.swamedia.com/southwest-stories/wifi-modernization-first-viasat-aircraft-enters-service-MC5XTXWTTLWNESJDQR4LZQBID12I.</p> <div>DOES SOUTHWEST USE VIASAT?</div> <p>Yes. Southwest airlines announced in March 2023 that new aircraft with the airline will come with factory-installed Wi-Fi connectivity powered by Viasat. The Ka-band connectivity will offer faster, reliable Wi-Fi network connections for Southwest passengers. Viasat currently offers In-Flight Connectivity services to Delta Air Lines, JetBlue, American and United. The first Viasat-equipped aircraft entered service in March 2023 for various North American routes. Viasat is proud to have been selected as the provider in this partnership.</p> <p>The connectivity will use three large Ka-band satellites, Viasat-1, Viasat-2 and the recently launched Viasat-3 once it completes in-orbit testing, which is expected to be late summer or the fall of 2023. Viasat is a global communications company that provides high-speed satellite internet and other communication services. It operates a satellite network that delivers broadband internet access to residential, commercial, and government customers, particularly in areas where traditional wired internet infrastructure is limited or unavailable.</p> <p>Source: https://www.rsinc.com/does-southwest-use-viasat.php.</p>		



U.S. Patent No. 7,324,469 (Claim 24)	
Claim(s)	Example Southwest Count 5 Systems and Services
	 <p>Our hybrid satellite network combines our own satellites with capacity on over 50 third-party satellites, providing scalable capacity, reliability and redundancy, and cost-effective solutions for our customers.</p> <p>As the industry pioneer in regional inflight Connectivity and gigabit-class cruise ship connectivity, Anuvu has continuously invested in new technologies to keep pace with end-user expectations. We recognize the importance of reliable, fast, global connectivity for our customers around the world. Our hybrid network, consisting of high-throughput geostationary satellites and 4G/5G mobile connectivity, builds on the industry's first and most capable SD-WAN platform optimized for aviation and maritime applications.</p> <p>96% Anuvu's world satellite coverage</p> <p>1000+ Aircraft connected - the largest domestic single-aisle fleet in the world</p> <p>Source: https://www.anuvu.com/our-portfolio/connectivity.</p>
[24.c] a subscriber access unit operatively coupled between the satellite dish and the at least one router, the subscriber access unit being capable of authenticating a subscription account associated with a user prior to allowing the user access to the Internet; and	<p>On information and belief, the Southwest Count 5 Systems and Services include a subscriber access unit operatively coupled between the satellite dish and the at least one router, the subscriber access unit being capable of authenticating a subscription account associated with a user prior to allowing the user access to the Internet.</p> <p>On information and belief, the IFC includes a satellite antenna, multiple WAPs, and an onboard server that hosts information passenger-focused services.</p>

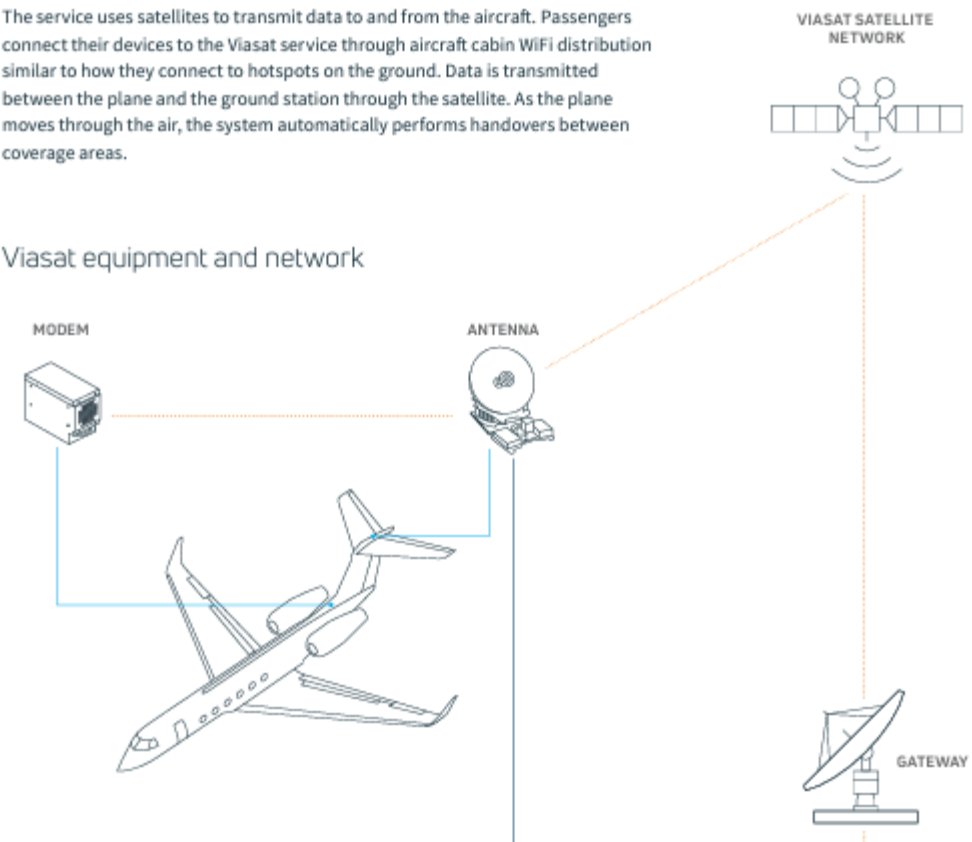
U.S. Patent No. 7,324,469 (Claim 24)	
Claim(s)	Example Southwest Count 5 Systems and Services
	<div><p>The diagram illustrates a network architecture for a Southwest Count 5 system. On the left, a satellite dish is connected via dashed lines to three service options: 'Optional ATG service', 'Viasat terminal (Ku or Ka)', and 'Optional L-band service'. These services connect to a central '4G LTE' block, which contains a router icon and lists 'Router management' and 'Optional on-ground connectivity'. To the right of the 4G LTE block is a red-bordered box containing a server icon and the functions 'Network management' and 'Monitoring/statistics'. Below the 4G LTE block is a router icon with 'Least-cost routing' and 'Application firewall' functions. A 'Wi-Fi access point' is connected to the router, and 'Optional additional antennas' are shown on the far right. Solid blue lines represent primary connections, while dashed blue lines represent optional connections.</p></div> <p>Source: https://www.viasat.com/content/dam/us-site/aviation/documents/Viasat_Select_Router-datasheet.pdf.</p>

U.S. Patent No. 7,324,469 (Claim 24)	
Claim(s)	Example Southwest Count 5 Systems and Services
	<p>How it works The service uses satellites to transmit data to and from the aircraft. Passengers connect their devices to the Viasat service through aircraft cabin WiFi distribution similar to how they connect to hotspots on the ground. Data is transmitted between the plane and the ground station through the satellite. As the plane moves through the air, the system automatically performs handovers between coverage areas.</p> <p>Viasat equipment and network</p>  <p>The diagram illustrates the Viasat system architecture. On the left, a 'MODEM' is connected to an 'ANTENNA' (depicted as a satellite dish) mounted on an aircraft. The aircraft is shown in flight. A dashed line connects the antenna to a satellite in the 'VIASAT SATELLITE NETWORK' (represented by a yellow box with a satellite icon). Another dashed line connects the satellite to a 'GATEWAY' (a ground station with a large dish) on the right. A solid blue line connects the modem to the antenna, and another solid blue line connects the antenna to the aircraft's cabin area.</p> <p>Source: https://www.viasat.com/content/dam/us-site/aviation/documents/932043_Global_Ku-band_Advanced_Brochure_016_web.pdf.</p> <p>On information and belief, Southwest passengers authenticate themselves on the SouthwestWiFi.com web portal to access in-flight Wi-Fi using on-board server(s). The authentication completes when the user enters their login credentials on the portal. Limited free Wi-Fi is available to passengers, and upgraded high-speed</p>

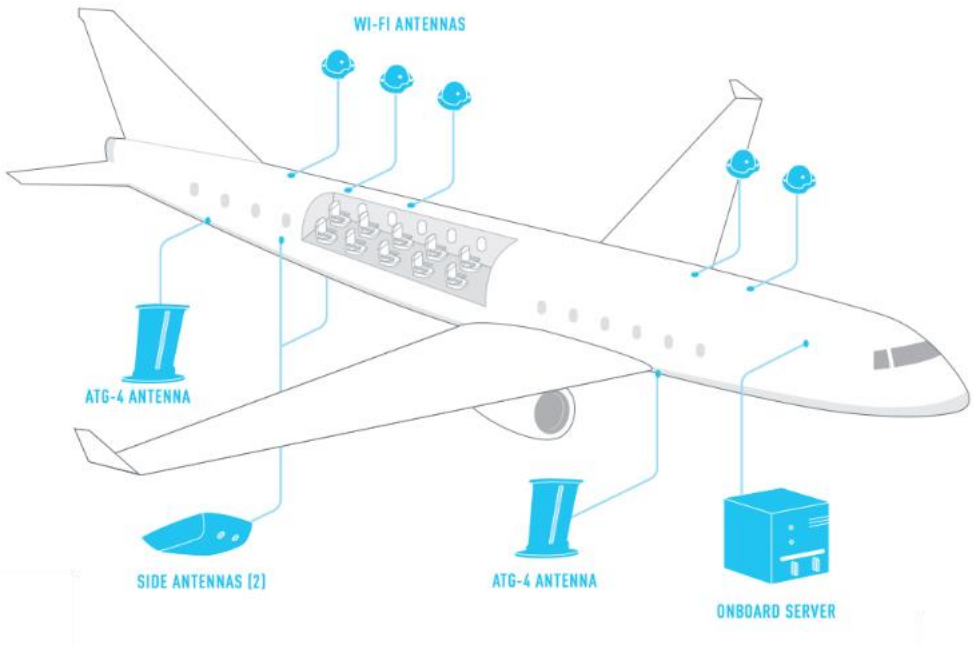
U.S. Patent No. 7,324,469 (Claim 24)	
Claim(s)	Example Southwest Count 5 Systems and Services
	<p>WiFi is available to certain Southwest members or can be purchased.</p> <div><p>How to Get Connected ^</p><div><div><p>1</p><p>Head to Settings. Turn on Airplane mode.</p></div><div><p>2</p><p>Turn on Wi-Fi. Choose SouthwestWiFi from the WiFi network list.</p></div><div><p>3</p><p>Tap Access the portal or open SouthwestWiFi.com in your browser directly.</p></div></div><p>Source: https://www.southwest.com/inflight-entertainment-portal/.</p><p>During your flight</p><div><p>How do I access Inflight Entertainment and Internet options? ▾</p><p>How do I access Free Internet benefits? ▴</p></div><p>Our A-List Preferred Members and Business Select Customers have access to Free Internet. From the hamburger menu, select "A-List Preferred & Business Select" to authorize your device using either your Rapid Rewards information or flight confirmation number.</p><p>Free Internet may be authorized by A-List Preferred Members and Business Select Customers on up to three devices per flight on their day of travel. A-List Preferred Members who purchase a Business Select Fare may authorize up to six devices per flight on their day of travel.</p><p>Source: https://www.southwest.com/inflight-entertainment-portal/.</p></div>

U.S. Patent No. 7,324,469 (Claim 24)	
Claim(s)	Example Southwest Count 5 Systems and Services
[24.d] a web-ready device operatively coupled to the at least one router, the web-ready device having a browser application operating thereon for accessing the Internet;	<p>On information and belief, the Southwest Count 5 Systems and Services include a web-ready device operatively coupled to the at least one router, the web-read device having a browser application operating thereon for accessing the Internet.</p> <p>On information and belief, Southwest enables access to onboard WiFi through seatback and/or user devices that include a browser application for Internet accessibility.</p> <div> <p>How to Get Connected ^</p>  <p>1 Head to Settings. Turn on Airplane mode.</p> <p>2 Turn on Wi-Fi. Choose SouthwestWiFi from the WiFi network list.</p> <p>3 Tap Access the portal or open SouthwestWiFi.com in your browser directly.</p> </div> <p>Source: https://www.southwest.com/inflight-entertainment-portal/.</p> <div> <p>Free Entertainment¹</p> <p>We've got something for everyone. With a wide variety of new releases and long-time Customer favorites, all movies are viewable right in your browser - no downloads or sign-ups required!</p> </div> <p>Source: https://www.southwest.com/inflight-entertainment-portal/.</p>

U.S. Patent No. 7,324,469 (Claim 24)	
Claim(s)	Example Southwest Count 5 Systems and Services
	<p style="text-align: center;">Stay Connected¹</p> <p style="text-align: center;">Keeping you connected to what matters to you—even when you're in the air. Access the portal to enjoy free texting² and \$8 Internet.⁴</p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>Free Texting</p>  <p>Keep those texts flying with iMessage and WhatsApp on your personal device. Visit the Texting page in Portal to activate service.</p> </div> <div style="text-align: center;"> <p>\$8 Internet</p>  <p>Go online to check email, browse social media, or snag a dinner reservation for just \$8 (free for our A-List Preferred Members and Business Select Customers) per device from takeoff to landing.</p> <div style="background-color: #f0f0f0; padding: 5px; margin-top: 10px;"> <p>Note: In order to provide a better experience, we may prohibit access to certain high-bandwidth applications, websites, and video conferencing services. In consideration of the public environment onboard we may also restrict potentially offensive online content.</p> </div> </div> </div> <p>Source: https://www.southwest.com/inflight-entertainment-portal/.</p>
[24.e] wherein the satellite dish, at least one router and the subscriber access unit are located in a remote location a experiencing a relatively high volume of transient traffic;	On information and belief, the Southwest Count 5 Systems and Services include a satellite dish, at least one router, and a subscriber access unit, where the satellite dish, at least one router and the subscriber access unit are located in a remote location a experiencing a relatively high volume of transient traffic.

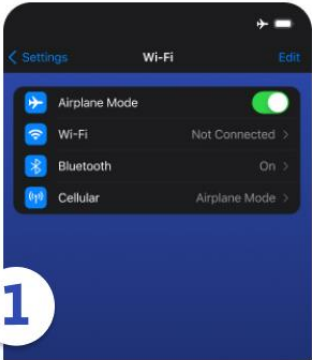
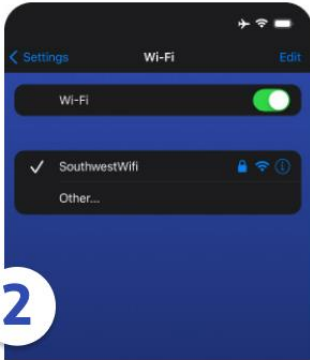
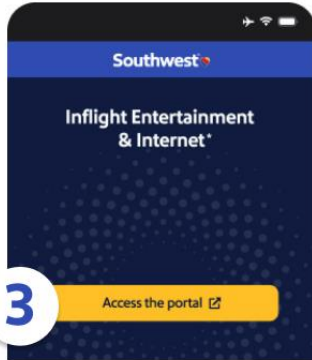
U.S. Patent No. 7,324,469 (Claim 24)	
Claim(s)	Example Southwest Count 5 Systems and Services
	<p>How it works</p> <p>The service uses satellites to transmit data to and from the aircraft. Passengers connect their devices to the Viasat service through aircraft cabin WiFi distribution similar to how they connect to hotspots on the ground. Data is transmitted between the plane and the ground station through the satellite. As the plane moves through the air, the system automatically performs handovers between coverage areas.</p> <p>Viasat equipment and network</p>  <p>The diagram illustrates the Viasat system architecture. On the left, a 'MODEM' is connected to an 'ANTENNA' (a parabolic dish). The antenna is mounted on an aircraft, which is shown in flight. A dashed orange line connects the antenna to a 'VIASAT SATELLITE NETWORK' satellite in orbit. The satellite is depicted with solar panels and a central body. A dashed orange line also connects the satellite to a 'GATEWAY' on the ground, which is represented by a large parabolic dish. A solid blue line connects the modem to the aircraft's cabin, indicating the internal network distribution.</p> <p>Source: https://www.viasat.com/content/dam/us-site/aviation/documents/932043_Global_Ku-band_Advanced_Brochure_016_web.pdf.</p>




U.S. Patent No. 7,324,469 (Claim 24)	
Claim(s)	Example Southwest Count 5 Systems and Services
	<div><p>The diagram illustrates a network architecture for a satellite-based system. On the left, a satellite dish is connected to three ground stations: 'Optional ATG service', 'Viasat terminal (Ku or Ka)', and 'Optional L-band service'. These ground stations are connected via dashed lines to a central router. The router is connected to a '4G LTE' block, which includes 'Router management' and 'Optional on-ground connectivity'. The router is also connected to a 'Wi-Fi access point' and 'Optional additional antennas'. The router's functions include 'Least-cost routing' and 'Application firewall'. The '4G LTE' block also includes 'Network management' and 'Monitoring/statistics'.</p></div> <p>Source: https://www.viasat.com/content/dam/us-site/aviation/documents/Viasat_Select_Router-datasheet.pdf.</p>

U.S. Patent No. 7,324,469 (Claim 24)	
Claim(s)	Example Southwest Count 5 Systems and Services
	<div><p>The diagram illustrates an aircraft equipped with several communication systems. Labels with leader lines point to the following components: 'WI-FI ANTENNAS' (three circular antennas on the upper fuselage), 'ATG-4 ANTENNA' (two large, blue, I-shaped antennas, one on the left wing and one on the right wing), 'SIDE ANTENNAS (2)' (two small, blue, circular antennas on the lower fuselage), and 'ONBOARD SERVER' (a blue rectangular unit located in the tail section of the aircraft).</p></div> <p>Source: https://onezero.medium.com/what-makes-it-possible-to-browse-the-internet-at-35-000-feet-1afaea83eb5.</p>

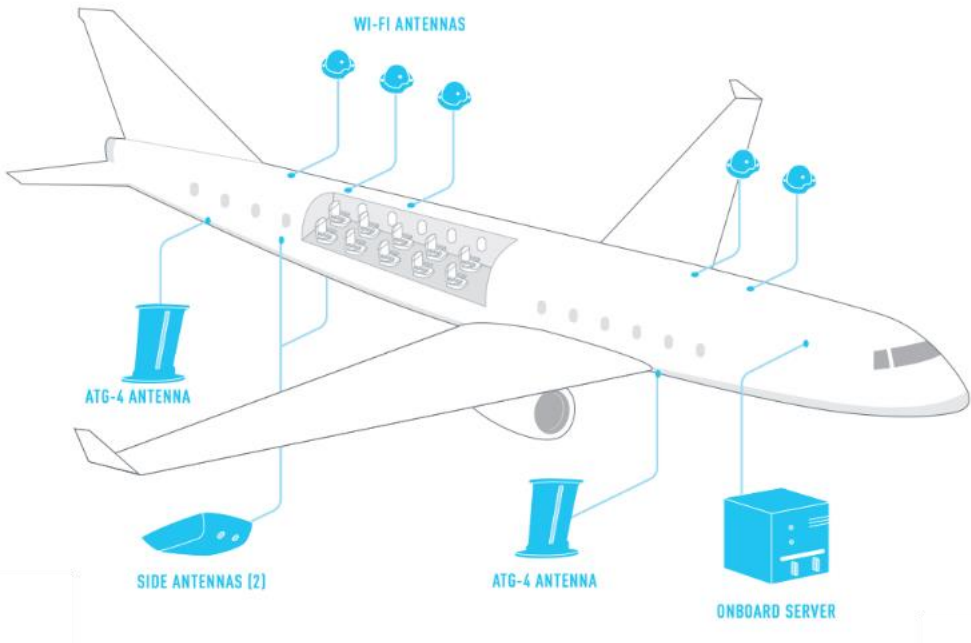
U.S. Patent No. 7,324,469 (Claim 24)	
Claim(s)	Example Southwest Count 5 Systems and Services
	<div><p>Two different ways WiFi works on airplanes</p><p>The diagram shows an airplane in flight. A satellite in orbit is connected to the airplane via blue curved lines representing data signals. A text box next to the satellite explains that data is sent and received from the airplane to provide global, high-speed connectivity. Below the airplane, a ground station on the ground is connected to the airplane via green curved lines. A text box next to the ground station explains that data is sent and received from the airplane to the ground and back, but this method only works on land and cannot handle streaming services. The ground station is shown with a dish antenna and is connected to a network of buildings and trees. The diagram is sourced from Honeywell and Insider Inc.</p><p>Satellites Data is sent and received from the airplane to provide global, high-speed connectivity.</p><p>Antenna</p><p>Air-to-ground connectivity Data is sent and received from the airplane, to the ground, and back. This only works on land and cannot handle streaming services.</p><p>Source: Honeywell</p><p>Insider Inc.</p><p>Source: https://www.businessinsider.com/how-airplane-wifi-works-2018-9.</p></div>

U.S. Patent No. 7,324,469 (Claim 24)																																		
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	<p style="text-align: center;">Southwest Airlines fleet</p> <table> <tr> <th>Aircraft</th><th>In service</th><th>Orders</th><th>Passengers</th><th>Notes</th></tr> <tr> <td>Boeing 737-700</td><td>374</td><td>—</td><td>143</td><td>Launch customer and largest operator.^[15] Older aircraft to be replaced by Boeing 737 MAX 7.</td></tr> <tr> <td>Boeing 737-800</td><td>205</td><td>—</td><td>175</td><td>To be replaced by Boeing 737 MAX 8.</td></tr> <tr> <td>Boeing 737 MAX 7</td><td>—</td><td>307</td><td>150^[33]</td><td>Deliveries begin in 2025.^[34] To replace older Boeing 737-700s.^[35]</td></tr> <tr> <td>Boeing 737 MAX 8</td><td>239</td><td>166</td><td>175</td><td>Largest Boeing 737 MAX operator. To replace Boeing 737-700s.^[35]</td></tr> <tr> <td>Total</td><td>818</td><td>473</td><td></td><td></td></tr> </table> <p>Source: https://en.wikipedia.org/wiki/Southwest_Airlines_fleet.</p>				Aircraft	In service	Orders	Passengers	Notes	Boeing 737-700	374	—	143	Launch customer and largest operator. ^[15] Older aircraft to be replaced by Boeing 737 MAX 7.	Boeing 737-800	205	—	175	To be replaced by Boeing 737 MAX 8.	Boeing 737 MAX 7	—	307	150 ^[33]	Deliveries begin in 2025. ^[34] To replace older Boeing 737-700s. ^[35]	Boeing 737 MAX 8	239	166	175	Largest Boeing 737 MAX operator. To replace Boeing 737-700s. ^[35]	Total	818	473		
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[24.f] wherein the user may authenticate the subscription account and access the Internet at the remote location by establishing a data connection between the web-ready device and the router.	<p>On information and belief, the Southwest Count 5 Systems and Services include WiFi where the user may authenticate the subscription account and access the Internet at the remote location by establishing a data connection between the web-ready device and the router.</p> <p>On information and belief, Southwest passengers authenticate themselves on the SouthwestWiFi.com web portal to access in-flight Wi-Fi. The authentication completes when the user enters their login credentials on the portal through seatback and/or user devices. Limited free Wi-Fi is available to passengers, and upgraded high-speed WiFi is available to certain Southwest members or can be purchased.</p>																																	

U.S. Patent No. 7,324,469 (Claim 24)	
Claim(s)	Example Southwest Count 5 Systems and Services
	<div><div>How to Get Connected ^</div><div><div><p>Head to Settings. Turn on Airplane mode.</p></div><div><p>Turn on Wi-Fi. Choose SouthwestWifi from the WiFi network list.</p></div><div><p>Tap Access the portal or open SouthwestWifi.com in your browser directly.</p></div></div><div>Source: https://www.southwest.com/inflight-entertainment-portal/.</div><div><div>During your flight</div><div><div>How do I access Inflight Entertainment and Internet options?</div><div>How do I access Free Internet benefits?</div></div><div><p>Our A-List Preferred Members and Business Select Customers have access to Free Internet. From the hamburger menu, select "A-List Preferred & Business Select" to authorize your device using either your Rapid Rewards information or flight confirmation number.</p><p>Free Internet may be authorized by A-List Preferred Members and Business Select Customers on up to three devices per flight on their day of travel. A-List Preferred Members who purchase a Business Select Fare may authorize up to six devices per flight on their day of travel.</p></div><div>Source: https://www.southwest.com/inflight-entertainment-portal/.</div><div>On information and belief, upon authentication the user may access the Internet through onboard WiFi, where a connection is established with onboard software and/or hardware including a router.</div></div></div>

U.S. Patent No. 7,324,469 (Claim 24)	
Claim(s)	Example Southwest Count 5 Systems and Services
	<div><div>How to Get Connected ^</div><div><div><div></div><div>Head to Settings. Turn on Airplane mode.</div></div><div><div></div><div>Turn on Wi-Fi. Choose SouthwestWifi from the WiFi network list.</div></div><div><div></div><div>Tap Access the portal or open SouthwestWifi.com in your browser</div></div></div></div> <div><div>Source: https://www.southwest.com/inflight-entertainment-portal/.</div><div><div>Free Entertainment¹</div><div>We've got something for everyone. With a wide variety of new releases and long-time Customer favorites, all movies are viewable right in your browser - no downloads or sign-ups required!</div></div><div><div>Source: https://www.southwest.com/inflight-entertainment-portal/.</div></div></div>

U.S. Patent No. 7,324,469 (Claim 24)	
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	<div><div>Stay Connected¹</div><div>Keeping you connected to what matters to you—even when you're in the air. Access the portal to enjoy free texting² and \$8 Internet.⁴</div><div><div><div>Free Texting</div><div></div><div>Keep those texts flying with iMessage and WhatsApp on your personal device. Visit the Texting page in Portal to activate service.</div></div><div><div><div>\$8 Internet</div><div></div><div>Go online to check email, browse social media, or snag a dinner reservation for just \$8 (free for our A-List Preferred Members and Business Select Customers) per device from takeoff to landing.</div></div><div><div><div> Note: In order to provide a better experience, we may prohibit access to certain high-bandwidth applications, websites, and video conferencing services. In consideration of the public environment onboard we may also restrict potentially offensive online content.</div></div></div></div><div>Source: https://www.southwest.com/inflight-entertainment-portal/.</div></div></div>

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U.S. Patent No. 7,324,469 (Claim 24)			
Claim(s)	Example Southwest Count 5 Systems and Services		
		Anuvu Legacy	Anuvu Upgraded
	Improved Speeds and Reliability	✗	✓
	Streaming (when authenticated for Internet)	✗	✓
	Device Swap	✗	✓
	Free Entertainment, Texting, and Flight Tracker	✓	✓
	<p>Source: https://www.swamedia.com/southwest-stories/wifi-modernization-first-viasat-aircraft-enters-service-MC5XTXWTTLWNESJDQR4LZQBIDI2I.</p> <div>DOES SOUTHWEST USE VIASAT?</div> <p>Yes. Southwest airlines announced in March 2023 that new aircraft with the airline will come with factory-installed Wi-Fi connectivity powered by Viasat. The Ka-band connectivity will offer faster, reliable Wi-Fi network connections for Southwest passengers. Viasat currently offers In-Flight Connectivity services to Delta Air Lines, JetBlue, American and United. The first Viasat-equipped aircraft entered service in March 2023 for various North American routes. Viasat is proud to have been selected as the provider in this partnership.</p> <p>The connectivity will use three large Ka-band satellites, Viasat-1, Viasat-2 and the recently launched Viasat-3 once it completes in-orbit testing, which is expected to be late summer or the fall of 2023. Viasat is a global communications company that provides high-speed satellite internet and other communication services. It operates a satellite network that delivers broadband internet access to residential, commercial, and government customers, particularly in areas where traditional wired internet infrastructure is limited or unavailable.</p> <p>Source: https://www.rsinc.com/does-southwest-use-viasat.php.</p>		

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	<div><p>Our hybrid satellite network combines our own satellites with capacity on over 50 third-party satellites, providing scalable capacity, reliability and redundancy, and cost-effective solutions for our customers.</p><p>As the industry pioneer in regional inflight Connectivity and gigabit-class cruise ship connectivity, Anuvu has continuously invested in new technologies to keep pace with end-user expectations. We recognize the importance of reliable, fast, global connectivity for our customers around the world. Our hybrid network, consisting of high-throughput geostationary satellites and 4G/5G mobile connectivity, builds on the industry's first and most capable SD-WAN platform optimized for aviation and maritime applications.</p><div><div>96% Anuvu's world satellite coverage</div><div>1000+ Aircraft connected - the largest domestic single-aisle fleet in the world</div></div></div> <p>Source: https://www.anuvu.com/our-portfolio/connectivity.</p>